

(19) 世界知的所有権機関  
国際事務局(43) 国際公開日  
2005 年 1 月 6 日 (06.01.2005)

PCT

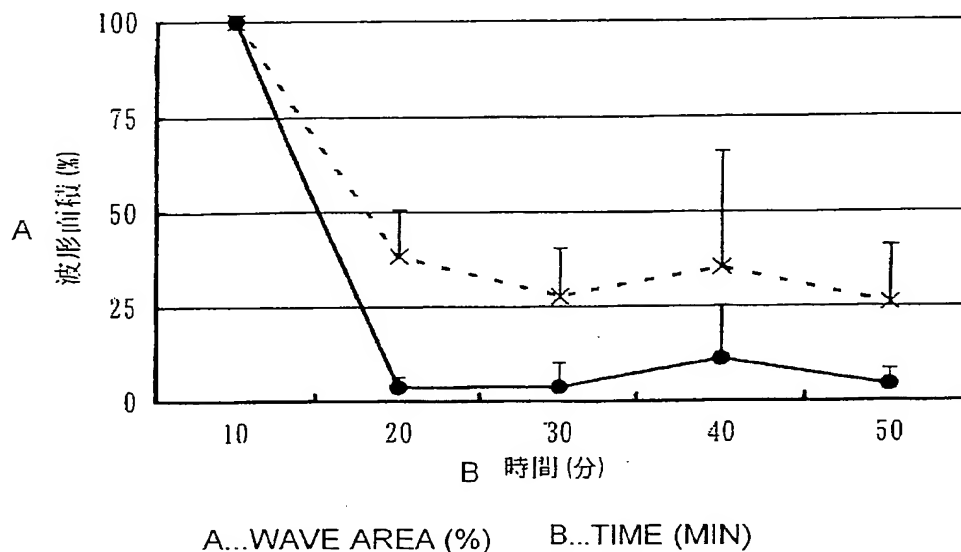
(10) 国際公開番号  
WO 2005/000361 A1

- (51) 国際特許分類<sup>7</sup>: A61K 49/00, 9/107, 47/10, 47/26, 47/34
- (21) 国際出願番号: PCT/JP2004/009096
- (22) 国際出願日: 2004 年 6 月 28 日 (28.06.2004)
- (25) 国際出願の言語: 日本語
- (26) 国際公開の言語: 日本語
- (30) 優先権データ:  
特願2003-186493 2003 年 6 月 30 日 (30.06.2003) JP
- (71) 出願人 (米国を除く全ての指定国について): 日本製薬株式会社 (NIHON PHARMACEUTICAL CO., LTD.) [JP/JP]; 〒1010031 東京都千代田区東神田 1-9-8 Tokyo (JP).
- (72) 発明者; および
- (75) 発明者/出願人 (米国についてのみ): 濱脇 智度 (HAMAWAKI, Tomonori) [JP/JP]; 〒5988558 大阪府泉佐野市住吉町 2 6 番 日本製薬株式会社 大阪研究所内 Osaka (JP). 片岡 洋介 (KATAOKA, Yosuke) [JP/JP]; 〒5988558 大阪府泉佐野市住吉町 2 6 番 日本製薬株式会社 大阪研究所内 Osaka (JP). 磯田 貴子 (ISODA, Takako) [JP/JP]; 〒5988558 大阪府泉佐野市住吉町 2 6 番 日本製薬株式会社 大阪研究所内 Osaka (JP).
- (74) 代理人: 谷 良隆 (TANI, Yoshitaka); 〒5410047 大阪府大阪市中央区淡路町 2 丁目 1 番 1 3 号 弘栄ビルディング 3 階 Osaka (JP).
- (81) 指定国 (表示のない限り、全ての種類の国内保護が可能): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR,

[続葉有]

(54) Title: MENTHOL-CONTAINING PREPARATION

(54) 発明の名称: メントール含有製剤



(57) Abstract: It is known that L-menthol soothes smooth muscle motility. In order to use L-menthol in practice as a digestive tract motility soothing agent in digestive tract endoscopy, it is required to devise means of giving a preparation in which an L-menthol-containing solution remains stable and transparent or little cloudy over a long time after the production and which shows little foaming at the administration. To a smooth muscle motility soothing agent or a digestive tract motility soothing agent containing a relatively transparent L-menthol emulsion having an average particle size of less than 100 nm, a defoaming agent is further added. Thus, it is possible to obtain a preparation which remains stable over a long time, has a high light transmittance and suffers from no foaming in filling into a container or topical administration for, e.g., digestive tract endoscopy, thereby facilitating the observation of a disease area.

(57) 要約: L-メントールに平滑筋蠕動抑制作用のあることは知られているが、これを消化管内視鏡検査時の消化管蠕動抑制剤として実用に供するためには、L

[続葉有]

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/009096

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> A61K49/00, 9/107, 47/10, 47/26, 47/34

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> A61K49/00-49/22, 9/00-9/107, 47/00-47/34

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2004
Kokai Jitsuyo Shinan Koho	1971-2004	Toroku Jitsuyo Shinan Koho	1994-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

JSTPLUS (JOIS), JMEDPLUS (JOIS), CAPLUS (STN), REGISTRY (STN), MEDLINE (STN), EMBASE (STN), WPI (DIALOG)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ASAO, T. et al., An easy method for the intra luminal administration of peppermint oil before colonoscopy and its effectiveness in reducing colonic spasm. Gastrointest.Endosc., 2001, 53(2), pages 172 to 177	1-7
A	MORITA, M. et al., Quantative Structure-Spasmolytic Activity Relationships of Terpenoids and Their Derivatives from <i>Alpinia speciosa</i> , <i>Alpinia japonica</i> and <i>Atractylodes lancea</i> . Natural Med., 1998, 52(1), pages 22 to 31	1-7

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

06 October, 2004 (06.10.04)

Date of mailing of the international search report

26 October, 2004 (26.10.04)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

ATTACHMENT F

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/009096

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Naoki HIKI et al., "Shokakan Naishikyo Kensa ni Okeru Peppermint oil Kan Konai Chokusetsu Sanpu ni yoru Kozendo Koka", Dai 10 Kai Clinical Video Forum(CVF) Program Shorokushu, 2002, page 73	1-7
A	JP 6-56623 A (Kao Corp.), 01 March, 1994 (01.03.94), (Family: none)	1-7
A	WO 92/06947 A1 (PULITZER ITALIANA S.R.L.), 30 April, 1992 (30.04.92), & AU 9185482 A & EP 552186 A1	1-7
P, Y	WO 03/097026 A1 (NIHON PHARMACEUTICAL CO., LTD.), 27 November, 2003 (27.11.03), & AU 2003235360 A1	1-7
P, Y	WO 03/097027 A1 (NIHON PHARMACEUTICAL CO., LTD.), 27 November, 2003 (27.11.03), & AU 2003235363 A1	1-7
P, Y	JP 2003-292450 A (Naoki HIKI), 15 October, 2003 (15.10.03), (Family: none)	1-7